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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/585,389	06/02/2000	Takeki Yazaki	NIT-200	5623

24956 7590 10/12/2006

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EXAMINER	
LAZARO, DAVID R	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/585,389	YAZAKI ET AL.	
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-9 and 21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-9 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 07/07/2006.

2. Claims 1, 4-9 and 21 were amended.

3. Claims 2, 3 and 10-20 are canceled.

4. Claims 1, 4-9 and 21 are pending in this office action.

Response to Amendment/Arguments

5. Applicant's arguments with respect to claims 1, 4-9 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 4-9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,147,970 by Troxel (Troxel) in view of U.S. Patent 6,023,456 by Chapman et al. (Chapman).

8. With respect to Claim 1, Troxel teaches a bandwidth monitoring method suitable for use in a network on which specific type of packets are transferred in preference to packets other than the specific type of packets, comprising the steps of:

receiving a packet (Col. 16 lines 43-65);

detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items; determining whether the received packet is of the specific type or not based on the result of the detected flow; (Col. 16 lines 43-55 and Col. 21 lines 10-15: priority may be based on the CLP (Cell Loss Priority) value in the header);

monitoring whether the specific type of packets violate a contract bandwidth under contract with a source of the specific type of packets (Col. 15 line 57 - Col. 16 line 5 and Col. 16 line 43 - Col. 17 line 22: policing of contract bandwidth is based on a token bucket method where high priority packets use the entire bucket); and

when the packets of the specific type do not violate the contract bandwidth and the received packet does not correspond to the specific type of packets, transmitting the received packet after converting it to a packet having a specific value indicative of the specific type of packet in its header (Col. 17 lines 11-34 and Col. 21 lines 10-15: priority upgrade outlet allows non-conforming packets to be converted to a packet having the specific value indicative of a priority packet (changing the CLP value, for example) when there is unused capacity. A situation where there is unused capacity would include a situation where high priority packets have not made use of the entire bucket (i.e. high priority packets have not violated the contract bandwidth)).

Troxel does not explicitly disclose detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items other than priority information. Chapman

teaches that a flow can be detected based on in-header information items other than priority information (Col. 3 lines 42-47 and Col. 4 lines 43-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Troxel and modify it as indicated by Chapman such that it further comprises detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items other than priority information. One would be motivated to have this, as there is need for detecting flows using in-header information and for policing the flows based on this detection (In Chapman: Col. 4 lines 61-64 and Col. 7 lines 30-39).

9. With respect to Claim 4, Troxel further teaches receiving a packet whose header has a priority field indicating priority information; and judging as to whether the received packet correspond to the specific type of packets is performed according to a value in the priority field (Col. 16 lines 43-55 and Col. 21 lines 10-15: priority may be based on the CLP (Cell Loss Priority) value in the header).

10. With respect to Claim 5, Troxel further teaches wherein said monitoring is carried out by using a leaky bucket algorithm with a first depth of bucket when the received packet does not correspond to the specific type of packets, and a leaky bucket algorithm with a second depth of bucket different from the first depth when the received packet corresponds to the specific type of packets, thereby to judge whether or not said packet violates the contract bandwidth being under contract with the source of the packet (Col. 15 line 57 - Col. 16 line 5 and Col. 16 line 43 - Col. 17 line 22: The token

bucket algorithm is a form of the leaky bucket algorithm. The policing of contract bandwidth in this token bucket method includes a depth for high priority packets and a depth for normal or low priority packets).

11. With respect to Claim 6, Troxel teaches A bandwidth monitoring method for use in a network, comprising the steps of:

receiving a packet (Col. 16 lines 43-65);

detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items; determining whether the received packet corresponds to the specific type of packets according to the result of the flow detection (Col. 16 lines 43-55 and Col. 21 lines 10-15: priority may be based on the CLP (Cell Loss Priority) value in the header);

monitoring whether the specific type of packets violate a contract bandwidth under a contract with a source of the specific type of packets (Col. 15 line 57 - Col. 16 line 5 and Col. 16 line 43 - Col. 17 line 22: policing of contract bandwidth is based on a token bucket method where high priority packets use the entire bucket); and

transmitting the received packet , when a bandwidth being used the specific type of packets is less than or equal to a first bandwidth smaller than the contract bandwidth and the received packet does not correspond to the specific type of packets, after converting it to a packet having the specific value indicative of the specific type of packet in its header (Col. 17 lines 11-34 and Col. 21 lines 10-15: priority upgrade outlet allows non-conforming packets to be converted to a packet having the specific value indicative of a priority packet (changing the CLP value, for example) when there is

unused capacity. A situation where there is unused capacity would include a situation where high priority packets have not made use of the entire bucket (i.e. high priority packets have not violated the contract bandwidth)).

Troxel does not explicitly disclose receiving a packet whose header has no priority information and detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items other than priority information. Chapman teaches that a flow can be detected based on in-header information items other than priority information from a packet received without priority information (Col. 3 lines 42-47 and Col. 4 lines 43-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Troxel and modify it as indicated by Chapman such that it further comprises receiving a packet whose header has no priority information and detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items other than priority information. One would be motivated to have this, as there is need for detecting flows using in-header information and for policing the flows based on this detection (In Chapman: Col. 4 lines 61-64 and Col. 7 lines 30-39).

12. With respect to Claim 7, Troxel further teaches transmitting the received packet as a packet other than the specific type of packets when the bandwidth being used by the source of the packet exceeds the first bandwidth and the received packet does not correspond to the specific type of packets (Col. 16 line 43 - Col. 17 line 10).

13. With respect to Claim 8, Troxel further teaches transmitting the received packet as a packet other than the specific type of packets when the bandwidth being used by the source of the packet exceeds the contract bandwidth and the received packet corresponds to the specific type of packets (Col. 17 lines 6-10 and Col. 21 lines 25-28).

14. With respect to Claim 9, Troxel teaches all the limitations of Claim 6, wherein said monitoring method is carried out by using a leaky bucket algorithm with a first depth of bucket when the received packet does not correspond to the specific type of packets, and a leaky bucket algorithm with a second depth of bucket when the received packet corresponds to the specific type of packets, said first depth being different from said first depth, thereby to judge whether or not said packet violates the contract bandwidth being under contract with the source of the packet (Col. 15 line 57 - Col. 16 line 5 and Col. 16 line 43 - Col. 17 line 22: The token bucket algorithm is a form of the leaky bucket algorithm. The policing of contract bandwidth in this token bucket method includes a depth for high priority packets and a depth for normal or low priority packets).

15. With respect to Claim 21, Troxel teaches a bandwidth monitoring method suitable for use in a network, comprising the steps of:

receiving a packet (Col. 16 lines 43-65);

detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items; judging whether the received packet is one of specific type of packets to be transmitted in preference to packets having a type other than the specific type,

according to the result of the flow detection (Col. 16 lines 43-55 and Col. 21 lines 10-15: priority of packets may be based on the CLP (Cell Loss Priority) value in the header);

monitoring whether the specific type of packets violate a contract bandwidth under a contract with a source of the specific type of packets (Col. 15 line 57 - Col. 16 line 5 and Col. 16 line 43 - Col. 17 line 22: policing of contract bandwidth is based on a token bucket method which includes a depth for high priority packets); and

when the packets of the specific type do not violate the contract bandwidth and the received packet does not correspond to the specific type of packets, providing the specific value indicative of the specific types of packets to the received packet and transmitting the received packet with the specific value in its header (Col. 17 lines 11-34 and Col. 21 lines 10-15: priority upgrade outlet allows non-conforming packets to be converted to a packet having the specific value indicative of a priority packet (changing the CLP value, for example) when there is unused capacity. A situation where there is unused capacity would include a situation where high priority packets have not made use of the entire bucket (i.e. high priority packets have not violated the contract bandwidth)).

Troxel does not explicitly disclose receiving a packet whose header has no priority information and detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items other than priority information. Chapman teaches that a flow can be detected based on in-header information items other than priority information from a packet received without priority information (Col. 3 lines 42-47 and Col. 4 lines 43-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Troxel and modify it as indicated by Chapman such that it further comprises receiving a packet whose header has no priority information and detecting flow of the received packet by judging whether the received packet coincides with a flow condition predefined with at least one of in-header information items other than priority information. One would be motivated to have this, as there is need for detecting flows using in-header information and for policing the flows based on this detection (In Chapman: Col. 4 lines 61-64 and Col. 7 lines 30-39).

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Lazaro
October 6, 2006

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER